

### Warm-Up

1. Order these numbers from least to greatest.

1.4      -1.5       $\frac{3}{7}$       -1      0.5

### Practice

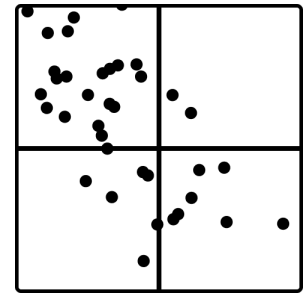
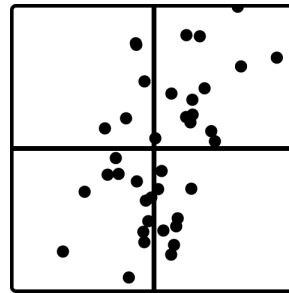
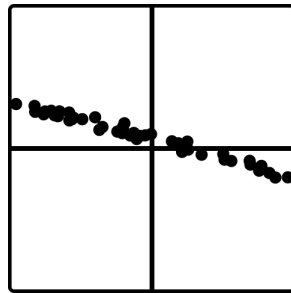
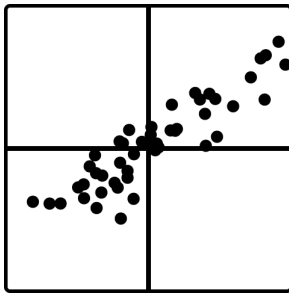
2. Match each scatter plot to its  $r$ -value.

0.7

- 0.7

0.9

- 0.99

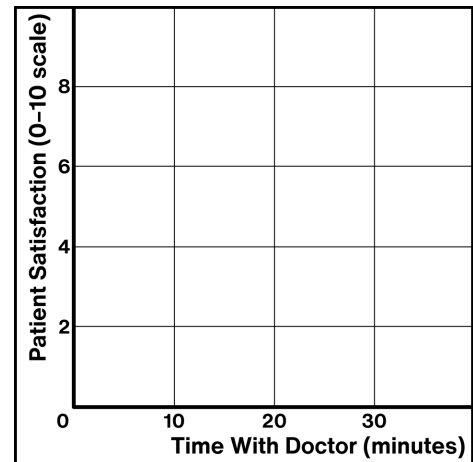


3. A medical clinic wanted to know about the experiences of their patients. They looked at the following variables:

- Patient satisfaction (on a 1-10 scale).
- The number of minutes spent with a doctor.

They found a **weak, positive** relationship.

Make a scatter plot that could be this data.

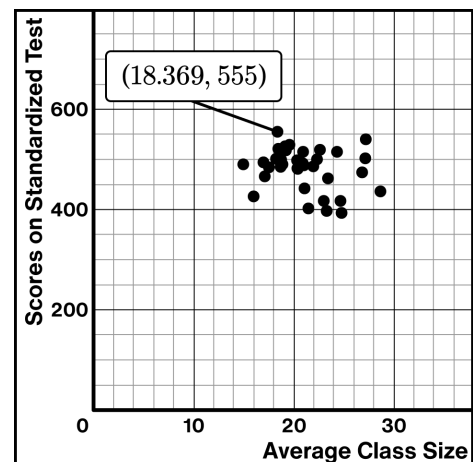


4. Martina was interested in education systems in different countries. She found data about two variables for different countries:

- The average class size.
- The scores on a standardized test.

The scatter plot for the data is shown. The point (18.369, 555) represents Slovakia.

What do the coordinates tell you about Slovakia?



Unit A1.3, Lesson 12: Practice Problems

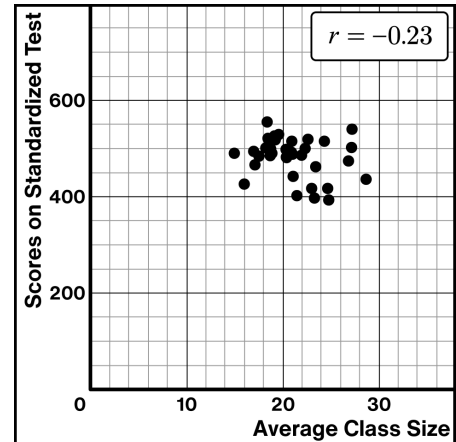
5. The scatter plot and  $r$ -value for the data is shown.

Based on the  $r$ -value, what kind of relationship is there between the variables?

Positive                      Negative                      No association

What is the strength of the relationship?

Weak                                      Strong

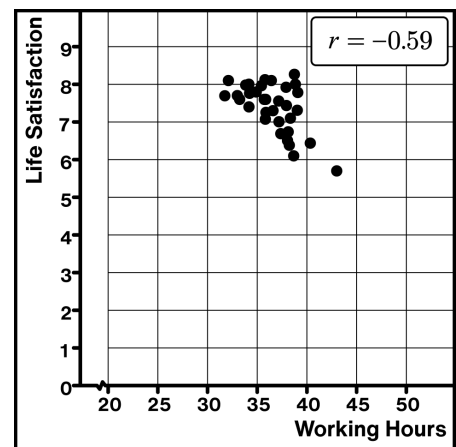


6. Saanvi was interested in life in different countries. She found data about two variables:

- Average life satisfaction (on a 1–10 scale).
- The average number of hours people worked in a week.

The scatter plot and  $r$ -value for the data is shown.

What does the  $r$ -value tell you about the relationship between life satisfaction and hours worked?



7. The World Series determines which Major League Baseball team is the league champion.

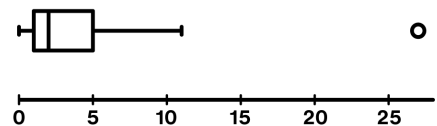
The box plot shows how many World Series championships each team has won.

The San Francisco Giants has won 8 championships.

Where does this put them compared to the other teams?

Lowest 25%                      Middle 50%                      Top 25%

Number of World Series Championships



Reflect

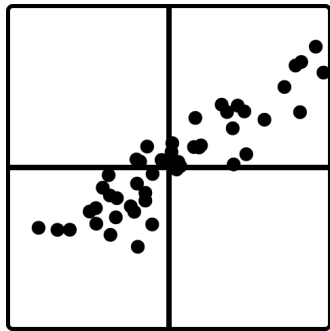
1. Put a heart next to the problem you feel most confident about.
2. Use the space below to ask a question or share something you are proud of.

Warm-Up

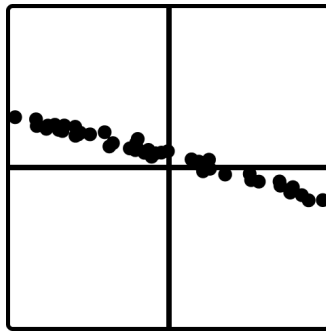
1.  $-1.5$ ,  $-1$ ,  $\frac{3}{7}$ ,  $0.5$ ,  $1.4$

Practice

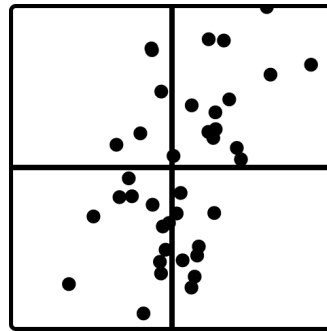
2.



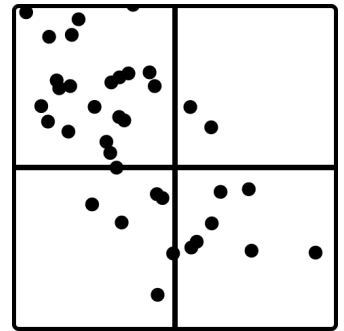
0.9



- 0.99

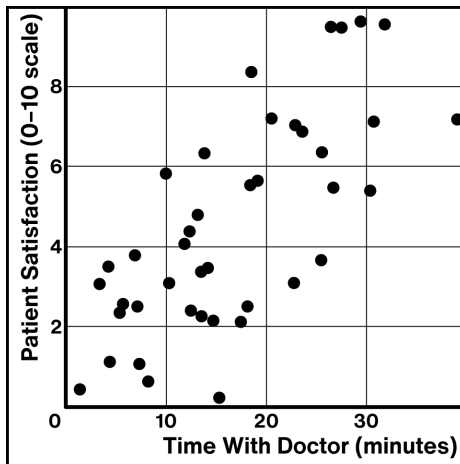


0.7



- 0.7

3. *Responses vary.*



4. *Responses vary.* The coordinate (18.369, 555) tells me that the average class size in Slovakia is about 18 students and the average score on a standardized test is 555.
5. Negative. Weak.
6. *Responses vary.* The  $r$ -value is negative so it tells me that the more hours someone works, the lower their life satisfaction tends to be.
7. Top 25%